

XI.—*Supplement to a Catalogue of British Spiders, including remarks on their Structure, Functions, Economy and Systematic Arrangement.* By JOHN BLACKWALL, F.L.S.

SUCH additions and corrections as may tend to render more complete my catalogue of British spiders, published in the 'Annals and Magazine of Natural History,' Second Series, volumes vii. viii. ix. and x., will be given in this supplement as occasions present themselves.

Tribe OCTONOCULINA.

Family LYCOSIDÆ.

Genus *Lycosa*, Latr.

Lycosa campestris.

To the notice of this species given in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. vii. pp. 257, 258), the following fact may be added. In the spring of 1851 I captured an adult female *Lycosa campestris* which had only six eyes; not the slightest rudiment of the lateral eyes of the anterior row was perceptible, even with the aid of a powerful magnifier.

The tyro in arachnology may learn from this example, should a similar instance of anomalous structure happen to come under his observation, not to conclude too hastily that, because the organs of vision are arranged symmetrically, he has discovered a true *Lycosa* whose normal number of eyes is six.

Lycosa cambrica.

The following particulars in connexion with this species have been ascertained since that part of the catalogue was published in which it is introduced (Annals and Mag. of Nat. Hist. Second Series, vol. vii. pp. 396, 397). In July and August the female deposits between 60 and 70 spherical eggs of a yellow colour in a globular cocoon of compact white silk, which is encircled by a narrow zone of a slighter texture and measures $\frac{1}{3}$ th of an inch in diameter.

On the 23rd of August 1851 I detected the apodous larva of an insect in a cocoon of *Lycosa cambrica*, which had fed on the young spiders as they were disengaged from the eggs; its abdomen of thirteen segments was short, broad, and of a pale brown colour mottled with white. On the 28th of the same month it spun an oviform cocoon of yellowish white silk of a slightish texture, in which it died in the pupa state.

Family SALTICIDÆ.

Genus *Salticus*, Latr.

After *Salticus cupreus* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. vii. p. 447) add the following species.

Salticus notatus.

Salticus notatus, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. x. p. 94.

An adult female of this species was found among herbage in a wood at Southgate, in Middlesex, in June 1850, and is in Mr. Walker's cabinet.

Salticus reticulatus.

Salticus reticulatus, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 14.

Specimens of this minute *Salticus* were discovered among moss growing in woods on the slopes of Gallt y Rhyg, a mountain near Oakland, in Denbighshire. The female is adult in autumn.

Family THOMISIDÆ.

Genus *Thomisus*, Walck.

After *Thomisus pallidus* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. vii. pp. 450, 451) add

Thomisus versutus.

Thomisus versutus, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 15.

Adult and immature individuals of this *Thomisus* were met with among grass growing in and near woods at Oakland in August 1852.

Thomisus incertus.

Add the following fact to the remarks on this species in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. vii. p. 451). In June 1852 a female *Thomisus incertus*, confined in a phial, fabricated a lenticular cocoon of white silk of a compact texture, which she attached to the glass. This cocoon measured $\frac{1}{4}$ th of an inch in diameter, and contained 20 whitish eggs of a spherical form, not adherent among themselves.

Family DRASSIDÆ.

Genus *Drassus*, Walck.

After *Drassus sericeus* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 40) add

Drassus reticulatus.

Drassus reticulatus, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. x. p. 97.

This spider was captured by Mr. Walker near Lancaster in August 1850.

Genus *Clubiona*, Latr.

After *Clubiona accentuata* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 96) add

Clubiona domestica.

Clubiona domestica, Wider, Museum Senckenb. B. i. p. 214. taf. 14. fig. 9.

Philoica notata, Koch, Die Arachn. B. viii. p. 55. tab. 268. fig. 631, 632.

An immature female *Clubiona domestica*, captured in Gloucestershire in 1852, was received from Mr. R. H. Meade in the summer of the same year.

M. Walckenaer is certainly mistaken in supposing this species to be identical with *Clubiona corticalis* (Hist. Nat. des Insect. Apt. t. iv. p. 439), from which it differs in organization and colour. The males are very dissimilar, not only differing remarkably in the relative length of their legs, but also in the structure of the palpi and palpal organs. The genus *Philoica* of M. Koch, like some of the other genera which he has proposed for adoption, comprises spiders belonging to different families.

Clubiona nutrix.

Under this head in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 96) the *Clubiona nutrix* of M. Hahn is introduced; but it must be admitted that the identity of this spider with the species whose name it bears is not so clearly ascertained as might be wished, for M. Walckenaer has included it among the synonyma of *Clubiona erratica*, and M. Koch entertains the opinion that Hahn has described the former species and delineated the latter; his words are, "der Beschreibung nach hatte Hahn unbezweifelt *Club. Nutrix* Walck. vor sich, dagegen deutet freilich dessen Abbildung auf *Club. erratica*" (Die Arachn. B. vi. p. 15).

Clubiona erratica.

The *Bolyphantes equestris* of M. Koch should be added to the synonyma of *Clubiona erratica* given in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 96). This will be rendered apparent on a perusal of the following passage

extracted from M. Koch's account of *Cheiracanthium carnifex* (*Clubiona erratica*):—"Meine *Bolyphantes equestris* Uebers. d. Arachn. Syst. bezeichnet eine olivenbräunliche oder rostbraune Abart" (Die Arachn. B. vi. p. 15).

I avail myself of this opportunity to correct an orthographical error which occurs under the heads of *Clubiona nutrix* and *Clubiona erratica* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 96). For *Chieracanthium* read *Cheiracanthium*.

Family CINIFLONIDÆ.

Genus *Ciniflo*, Blackw.

Ciniflo atrox.

Annex to the particulars of this species recorded in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. pp. 98, 99) the following remark. The subjoined dimensions of *Clubiona* (*Ciniflo*) *atrox* given by M. Hahn (Die Arachn. B. i. p. 115) have, most probably, been taken from *Ciniflo ferox*.

"Länge eines ausgewachsenen Weibchens 7 Linien. Breite des Hinterleibes $2\frac{1}{2}$ Linien."

Family AGELENIDÆ.

Genus *Agelena*, Walck.

Agelena elegans.

To the particulars in connexion with *Agelena elegans* given in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 101) the following facts relative to its œconomy may be appended. It spins a minute, horizontal sheet of web in depressions produced by the trampling of cattle, and by other causes, in damp soil; and in August the female constructs a plano-convex cocoon of compact white silk, measuring $\frac{5}{84}$ ths of an inch in diameter, which comprises 5 or 6 spherical eggs of a yellow colour, not cemented together, and is usually attached by its plane surface to the leaves of plants.

Family THERIDIIDÆ.

Genus *Theridion*, Walck.

Theridion sisypum.

As the remarks under this head in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 338) appertain to *Theridion tepidariorum*, they should be transferred to that species, merely substituting the trivial name *tepidariorum* for that

of *sisyphum*, and their place should be supplied by the following statement.

Theridion sisymphum occurs in the South of England, and was observed by Lister in Cambridgeshire, Lincolnshire, and Yorkshire. He remarks that it fabricates an extensive snare on the trunks of large oaks, and between the greater branches of trees; and that towards the end of June the female usually constructs in this snare a dome-shaped cell, whose concavity is directed downwards, in which she deposits one or more lenticular cocoons of a red-brown colour, containing her eggs.

After *Theridion sisymphum* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 338) add

Theridion tepidariorum.

Theridion tepidariorum, Koch, Die Arachn. B. viii. p. 75. tab. 273. fig. 646, tab. 274. fig. 647, 648.

This spider I had regarded as a variety of *Theridion sisymphum*, but by comparing numerous individuals with specimens of the latter species, for which I am indebted to Mr. R. H. Meade, I have satisfied myself that they are distinct; as, though nearly allied, they present differences in size, structure and colour; it will be seen also that there is a want of coincidence in their habits and œconomy.

In Germany, as in Britain, *Theridion tepidariorum* has only been met with in conservatories, a circumstance which has induced M. Koch to conjecture, with great probability, that it is not indigenous to that country, but that it has been introduced with exotic plants; and this conjecture applies with equal force to our own country. His words are, "fast möchte ich diese Art als eine ursprünglich deutsche in Zweifel ziehen, indem sie, wie es scheint, nur in warmen Glashäusern vorkommt; vielleicht ist ihre Brut mit aussereuropäischen Pflanzen nach Deutschland gebracht worden" (Die Arachn. B. viii. p. 78).

Theridion varians.

Since the remarks under this head appeared in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 443), I have captured an adult female *Theridion varians* which had only six eyes; the two posterior intermediate ones were entirely wanting, and the posterior eye of each lateral pair had not half of the usual size. An inexperienced observer might be induced by the symmetrical arrangement of the organs of vision in this individual not only to give it a place in the tribe *Senoculina*, but also to propose a new genus for its reception.

After *Theridion albens* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. viii. p. 445) add

Theridion flavo-maculatum.

Micryphantes flavo-maculatus, Koch, Die Arachn. B. iii. p. 67. tab. 95, fig. 220.

An adult male *Theridion flavo-maculatum*, which hitherto appears to have escaped the observation of arachnologists, was found running on a foot-path in a wood near Oakland in May 1852. The female of this species, previously described and figured by M. Koch under the name of *Micryphantes flavo-maculatus*, judging from the smallness of its size, was probably an immature individual; its colours, though not so intense, bear a close resemblance to those of the male in their distribution. A minute examination of the essential characters of this spider has induced me to remove it from the genus *Micryphantes* to that of *Theridion*.

Family LINYPHIIDÆ.

Genus *Linyphia*, Latr.

Linyphia crypticolens.

To the synonyma of this species, which is misspelled *cripticolens* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. ix. p. 16), add the *Meta cellulana* of M. Koch (Die Arachn. B. viii. p. 123. tab. 287. fig. 691, 692).

After *Linyphia tenuis* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. ix. p. 18) add the following species.

Linyphia terricola.

Linyphia terricola, Koch, Die Arachn. B. xii. p. 125. tab. 425. fig. 1047, 1048.

This spider, which varies considerably in colour, bears a striking resemblance to *Linyphia tenuis*; but the more slender form of the latter, the larger size of the anterior eyes of the trapezoid, which are somewhat wider apart, and are seated on a less prominent protuberance of the cephalo-thorax, together with slight modifications in the structure and development of the palpal organs of the male, serve, independently of colour, to distinguish it from the former. *Linyphia terricola* is common among moss growing in woods in many parts of England and Wales, and the sexes arrive at maturity in July and August.

The length of the male of this species given by M. Koch in the text is incorrect, but the line representing it in the plate rectifies the error.

M. Walckenaer has added *Linyphia terricola* to the synonyma of his *Linyphia bucculenta* (Hist. Nat. des Insect. Apt. t. iv. p. 485), which is a very different species, and is identical with the *Linyphia socialis* of Professor Sundevall, the name *Linyphia bucculenta* having been conferred by the Swedish naturalist on the species denominated *Linyphia reticulata* by M. Walckenaer.

Linyphia Meadii.

Linyphia Meadii, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 17.

Early in May 1852, adult individuals of both sexes of *Linyphia Meadii* were taken by Mr. R. H. Meade under a stone in a pasture at Low Moor, near Bradford.

Linyphia anthracina.

Linyphia anthracina, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 18.

This species, which appears to be nearly allied to *Linyphia nigella*, was received in July 1852 from Mr. R. H. Meade, who captured it near Bradford. In November, in the same year, Mr. Meade transmitted to me an adult female *Linyphia anthracina* which had been sent to him from Southgate, in Middlesex.

Linyphia pulla.

Linyphia pulla, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 19.

Both sexes of this spider, in a state of maturity, were discovered in Nab Wood, near Bingley, in Yorkshire, in 1852, by Mr. R. H. Meade, who forwarded specimens of them to me, and also an adult female which had been taken at Southgate.

Linyphia alacris.

Linyphia alacris, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 20.

Mr. R. H. Meade found specimens of this *Linyphia* in May 1852, in a wood near Bingley, and in the neighbourhood of Bradford, in Yorkshire.

Linyphia ericæa.

Linyphia ericæa, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 22.

Specimens of this small species of *Linyphia* have been found

in moss growing among heath in woods about Oakland, and at the roots of heath on Bingley Moor in Yorkshire. Two adult males and an immature female, captured in the latter locality, were received from Mr. R. H. Meade in October 1852.

Linyphia pernix.

Linyphia pernix, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. x. p. 98.

Mr. F. Walker captured this species in May 1850, among juniper bushes at Southgate.

Genus *Neriëne*, Blackw.

After *Neriëne fusca* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. ix. p. 270) add the following species.

Neriëne agrestis.

Neriëne agrestis, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 23.

This species, which is closely allied to *Neriëne fusca*, occurs among herbage and under stones in pastures near woods at Oakland. The sexes are adult in autumn.

Neriëne vigilax.

Neriëne vigilax, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 24.

An adult male of this species was found running on a gravel-walk at Oakland in July 1852.

Genus *Walckenaëra*, Blackw.

After *Walckenaëra parva* in the catalogue (Annals and Mag. of Nat. Hist. Second Series, vol. ix. p. 465) add

Walckenaëra exilis.

Walckenaëra exilis, Blackw. Annals and Mag. of Nat. Hist. Second Series, vol. xi. p. 24.

A specimen of this minute *Walckenaëra*, in a state of maturity, was discovered among moss growing at the root of an oak on the northern slope of Gallt y Rhyg in October 1852.